CLAIMS:

1. A damping device comprising:

a fluid film creating element which creates a fluid film between a roller bearing which rotatably supports a rotating shaft and a roller bearing support element which supports the roller bearing; and

a fluid supply element which supplies a fluid body to the fluid film creating element, wherein the fluid supply element increases the supply amount of the fluid body which is supplied to the fluid film creating element when a rotational velocity of the rotating shaft is relatively high.

2. The damping device of claim 1, wherein the fluid supply element increases the supply amount of the fluid body which is supplied to the fluid film creating element in relation to an increase of the rotational velocity of the rotating shaft.

3. The damping device of claim 1, wherein the fluid supply element is powered by the rotating shaft.

4. A system comprising:

an electric motor for a vehicle that supplies a driving force for the vehicle by rotating a rotating shaft;

roller bearings that rotatably support the rotating shaft;

a housing that supports the roller bearings;

a circular-shaped member that creates an oil film between at least one of the roller bearings and the housing; and

an oil pump that supplies oil to the circular-shaped member, wherein the oil pump increases the supply of the oil when the rotating shaft rotates at a relatively high rotational velocity.

5. The system of claim 4, wherein the oil pump is powered by the rotating shaft.

6. The system of claim 4, wherein an oil path for supplying oil from the oil pump to the circular-shaped member is located between an external surface and an internal surface of the housing in an axial direction of the rotating shaft.

7. The system of claim 4, wherein the oil pump is enclosed within the housing.

8. The system of claim 4, wherein the oil pump is located adjacent to the rotating shaft and opposite the circular-shaped member, wherein the oil circulates such that oil supplied from the oil pump to the circular-shaped member is discharged into an enclosure formed by the housing, passes through the enclosure, and is extracted from the enclosure by the oil pump and again supplied to the circular-shaped member.

9. The system of claim 4, wherein the oil pump is located adjacent to the circular-shaped member and the rotating shaft.

10. The system of claim 4, further comprising a control element that controls the supply of the oil and increases the supply when the rotational velocity of the rotating shaft is at least a threshold rotating value and a load on the rotating shaft is a threshold loading value or lower.

11. The system of claim 10, wherein the control element increases the threshold loading value when the rotating shaft rotates at a relatively high rotational velocity.

12. The system of claim 11, wherein the control element increases the threshold loading value in relation to the increase of the rotational velocity of the rotating shaft.

13. The system of claim 10, wherein the control element increases the supply when the speed of the vehicle becomes a threshold speed value or faster and the acceleration rate of the vehicle becomes a threshold acceleration rate value or lower.

14. The system of claim 10, wherein the control element increases the supply when the rotational velocity of the rotating shaft becomes a threshold rotational velocity value or higher and the acceleration rate of the vehicle becomes a threshold acceleration rate value or slower.

15. The system of claim 14, wherein the control element determines weather the vehicle is driving uphill or downhill and, if the control element determines the vehicle is driving uphill, the control element decreases the threshold acceleration rate value and if the control element determines the vehicle is driving downhill, the control element increases the threshold acceleration rate value.

16. The system of claim 10, further comprising:

a first oil path element forming a first oil path through which oil supplied from the oil pump to the circular-shaped member passes;

a drain tank where the oil discharged from the circular-shaped member is stored;

a second oil path element forming a second oil path through which oil supplied from the oil pump to the drain tank passes; and

a switching valve which is located between the first oil path and second oil path and the control element controls the supply by controlling the switching valve.

17. The system of claim 10, further comprising a clutch, wherein the oil pump is powered by the rotating shaft, the clutch is located between the rotating shaft and the oil pump, and the control element controls the supply by controlling an engagement strength of the clutch.

18. The system of claim 4, further comprising:

a reduction gear which transmits the driving torque of the electric motor for a vehicle to a set of driving wheels; and

a case which contains the reduction gear and connects an end of the rotating shaft that is adjacent to the circular-shaped member to the reduction gear and discharges the oil into the case.

19. A method comprising:

providing a supply of oil to a circular-shaped member that creates an oil film between at least one roller bearing and a housing, wherein the at least one roller bearing supports a rotating shaft; and

adjusting the supply of oil relative to a rotational velocity of the rotating shaft.

20. The method of claim 19, wherein the supply of the oil is adjusted proportionally to the rotational velocity.

21. The method of claim 19, wherein the supply of the oil is increased if the rotational velocity is at least a threshold rotational velocity value.

22 A damping device comprising:

means for creating a fluid film between a roller bearing which rotatably supports a rotating shaft and a roller bearing support element which supports the roller bearing; and

means for supplying a fluid body to the fluid film creating element,

wherein the fluid supply means includes means for increasing the supply amount of the fluid body which is supplied to the fluid film creating element when a rotational velocity of the rotating shaft increases.